

Office of Statewide Health Planning and Development

Facilities Development Division 1600 9th Street, Room 420 Sacramento, California 95814 (916) 654-3362 Fax (916) 654-2973 www.oshpd.ca.gov/fdd

Seismic Retrofit Program Overview

The Alguist Act establishes a seismic safety building standards program under OSHPD's jurisdiction for hospitals built on or after March 7, 1973. The Alquist Act was initiated because of the loss of life incurred due to the collapse of hospitals during the Sylmar earthquake of 1971. The Alquist Act emphasizes that essential facilities such as hospitals should remain operational after an earthquake. Hospitals built in accordance with the standards of the Alguist Act resisted the January 1994 Northridge earthquake with minimal structural damage, while several facilities built prior to the act experienced major structural damage and had to be evacuated. However, certain nonstructural components of the hospitals did incur damage, even in facilities built in accordance with the structural provisions of the Alguist Act. The provisions and subsequent regulation language of SB 1953 were developed to address the issues of survivability of both nonstructural and structural components of hospital buildings after a seismic event. Therefore, the ultimate public safety benefit of the Alguist Act is to have general acute care hospital buildings that not only are capable of remaining intact after a seismic event, but also capable of continued operation and provision of acute care medical services after a seismic event.

Hospitals as defined in Section 129725 and licensed pursuant to subdivision (a) of Section 1250 of the Health & Safety Code shall comply with the regulations developed by OSHPD as mandated by SB 1953. There are approximately 470 general acute care hospital facilities including the 2,673 hospital buildings that will be impacted by the provisions of SB 1953. If a facility is to remain a general acute care hospital facility beyond a specified date, the owner must conduct seismic evaluations, prepare both a comprehensive evaluation report and compliance plan to attain specified structural and nonstructural performance categories which must be submitted to OSHPD in accordance with these regulations.

The seismic evaluation procedure regulations consist of eleven articles. The primary purpose of these regulations is to evaluate the potential earthquake performance of a building or building components and to place the building into specified seismic performance categories. The evaluation procedures were developed from experience gained in evaluating and seismically retrofitting deficient buildings in areas of high seismicity.

One of the main provisions of SB 1953 is the development of earthquake or seismic performance categories, specifically the Structural Performance Categories (SPC) as found in Article 2 and the Nonstructural Performance Categories (NPC) as found in Article 11. These include seismic performance categories for new and existing general acute care hospital facilities in various subgradations, i.e., from those capable of providing services to the public after a seismic event to those at significant risk of collapse and that represent a danger to the public. Each facility would receive both an SPC and NPC, with both seismic performance categories



considered for determination of a facilities compliance with the provisions of the Alquist Act.

The seismic retrofit regulations, also known as Division III-R, apply to all existing general acute care hospital buildings. The goal of these regulations is to develop retrofit and repair designs for existing hospital buildings to yield predictable seismic performance, whether at the essential life safety level or post-earthquake continued operations level. The requirements of Division III-R must be used to upgrade from an existing seismic performance category to a higher category level. Specifically, these regulations were explicitly developed for use in the retrofit, repair, modification or alteration of existing hospital buildings.

Each general acute care hospital facility must be at certain seismic performance category levels by specified timeframes. For example, all general acute care hospital facility buildings must be at the SPC 2 ("Life Safety Level") by January 1, 2008 to be in compliance with the provisions of the regulations. In addition, timeframes for submittal of seismic evaluations, compliance plans, and other seismic performance levels are cited in the seismic evaluation procedure regulations.